

Figure 1

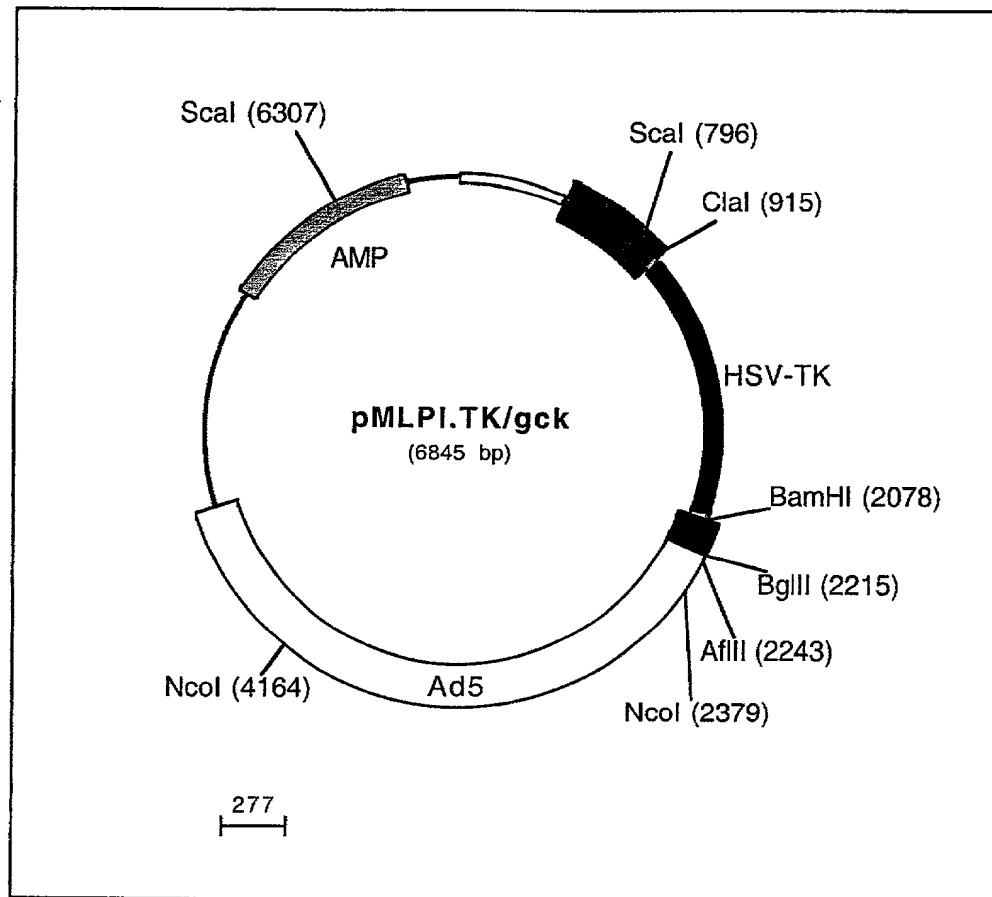


Figure 2

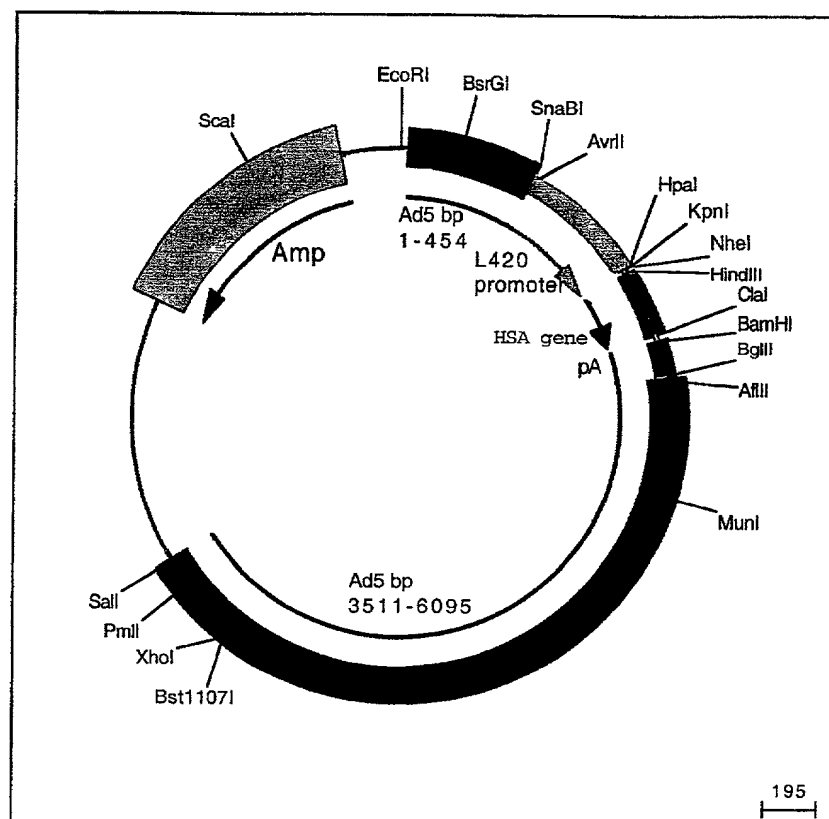


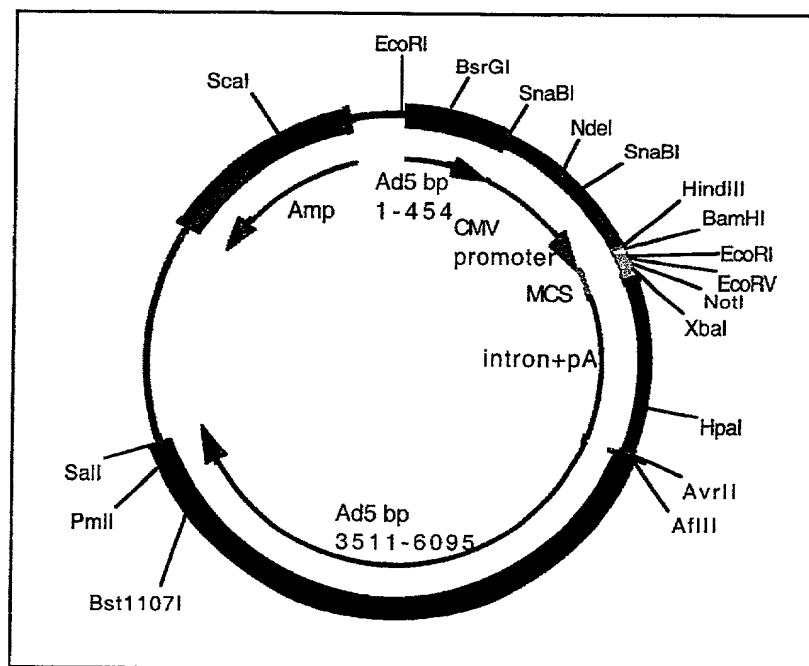
Figure 3

Figure 4

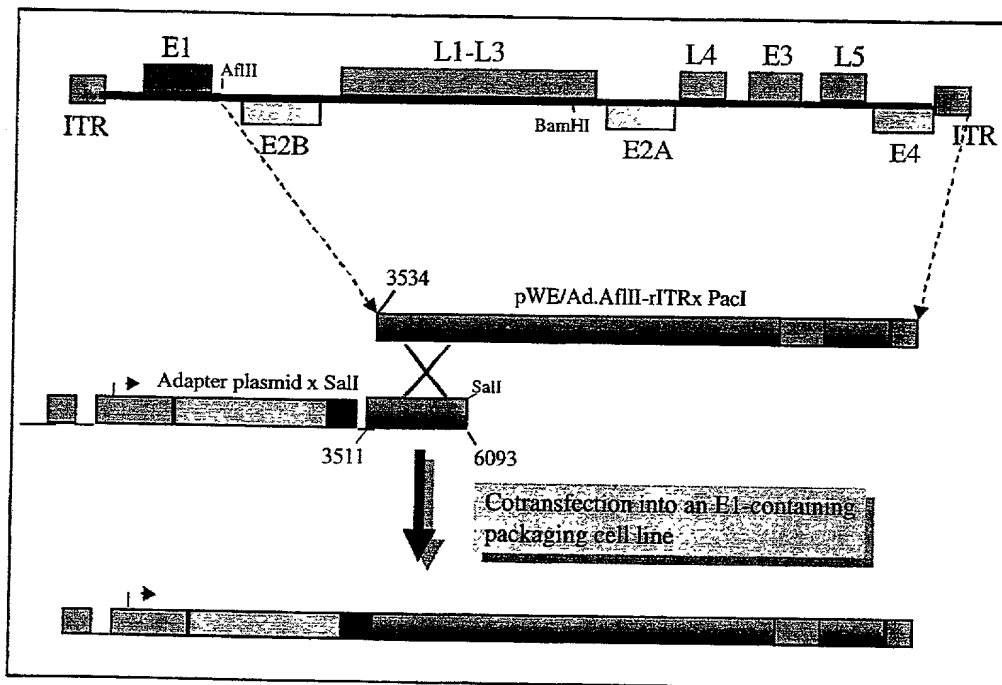


Figure 5

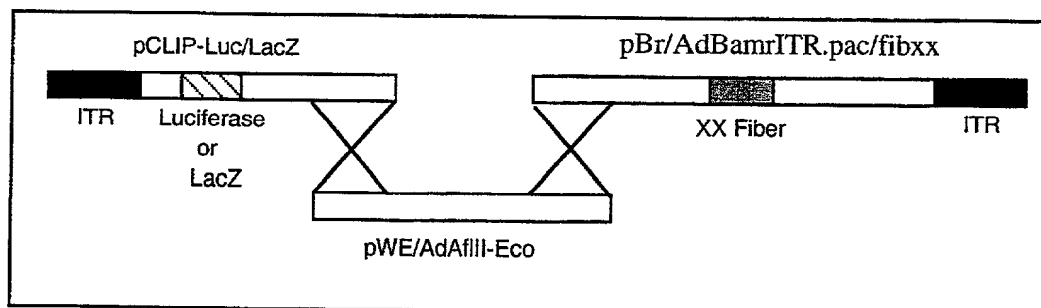


Figure 6

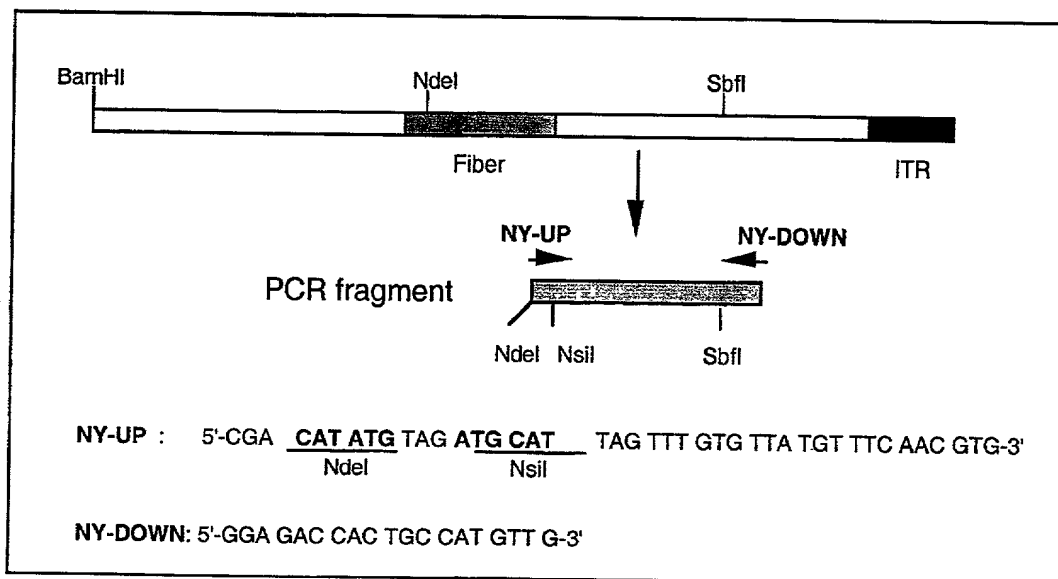


Figure 7:

1.1: Serotype 8 fiber protein

fig 7 sq1 SCSCPSAPTIFMLLQMKRARSEDTFNPVYPYGYARNQNIPFLTTPPFVSSNGFQ
 NFPPGVLSLKLADPTTINNQNVS LKVG GGLTLQEETGKLT VNT EPLHLTNNKLG I
 ALDAPFDVIDNKL TLLAGHGLSIITKETSTLPGLVNTLV VLTGKGIGTDLSNNGGN
 ICVRVGEGGGLSFNDNGDLVAFNKKEDKRTLWTPDTS PNCRIDQDKSKLTLV 377
 LTKCGSQILANVSLIVVAGRYKIINNNTNPALKGFTIKLLFDKNGVLMESSNLGKS
 YWNFRNQNSIMSTAYEKAIGFMPNLVAYPKPTTGSKKYARDIVYGN IYLG GKPH
 QPVTIKTTFNQETGCEYSITFDFSWAKTYVNVEFETTSFTFSYIAQE. {wat af }

1.2: Serotype 9 fiber protein

fig 7 sq2 SCSCPSAPTIFMLLQMKRARSEDTFNPVYPYGYARNQNIPFLTTPPFVSSDGFQ
 NFPPGVLSLKLADPIAVNGNVSLKVG GGLTLQDGTGKLT VNA DPPLQLTNNKL
 GIALDAPFDVIDNKL TLLAGHGLSIITKETSTLPGLINTLV VLTGKGIGTESTDNGG 377
 SVCVRVGEGGGLSFNDNGDLVAFNKKEDKRTLWTPDTS PNCRIDQDKSKLTL
 VLTGCGSQILANVSLIVVAGRYKIINNNTNPALKGFTIKLLFDKNGVLMESSNLGK
 SYWNFRNENSIMSTAYEKAIGFMPNLVAYPKPTAGSKKYARDIVYGN IYLG GKPH
 DQPVTIKTTFNQETGCEYSITFDFSWAKTYVNVEFETTSFTFSYIAQE. {wat af }

1.3: Serotype 13 fiber protein

fig 7 sq3 XXXXXSAPTIFMLLQMKRARSXDTFNPVYPYGYARNQNXFXTPPFVXSDGF
 KNPPGVLSLKLADPTTIANGDVSLKVG GGLTLQEGSLT VDPKAPLQLANDKKLE
 LVYDDPFEVSTNKL SLKVGHGLKVLDDKSAGGLKDLIGKLV VLTGKGIGIENLQ
 NDDGSSRGVGINVRLGTDGGLSFDRKGELVAVNRKDDRRRTLWTPDPSPNCKA 391
 ETEKDSKLTLVLTGCGSQILATVSIIVLKGKYE FVKKETEPKSF DVKLLFDSKGV L
 LPTSNLSKEYWNYRSYDNNIGTPYENAVPFMPNLKAYPKPTKTASDKAENKISS
 AKNKIVSNFYFGGQAYQPGTIINKFNEEIDETCAYSITFNF GWGKVYDNPFPDITS
 FTXSYIAQE. (0 niel)

1.4: Serotype 14 fiber protein

fig 7 sq4 HPFINPGFISPNQFTQSPDGVLTLKCLTPLTTTGGSLQLKVG GGLTVDDTDGTLQE
 NIGATTPLVKTGHSIGLSLGAGLGTDENKLC TKLGEGLTFNSNNICDDNINTLWT 291
 GVNPT EANCQMMDSSSENDC KLLTLVKTGALVTA FVYVIGVSNNFNMLTTYRN
 INFTEAELFFDSAGNLLTSLSLK TPLNHKSGQTWLLVPLLMLKVSCPAQLLILS IIL
 EKNKTTFTTELVTTLVITLLFPLTISVMLNQRAIRADTSYCIRITWSWNTGDAPEG
 QTSATTLVTS

1.5: Serotype 20 fiber protein

fig 7 sq5 IQNIPFLTTPPFVSSDGLQNFPFGVLSLKLADPIAVNGNVSLKVG GGLTVEQDSGQL
 IANPKAPLQVANDKLELSYAYPFETSANKLSLKV GQGLKVLDEKDSGGLQNLIG 345
 KLVLTGKGIGVEELKNPDNTNRGVGINVRLGKDGGLSFNKNELVAVNKHND

TGTLWTPDPSPNCKIEVKDSKLTVLTKCGSQILATMAFQVVKGTYENISKNT
AKNSFSIKLLFDDNGKILLEGSSLDKDYWNFRSDDSIIPNQYDNAVPFMPNLKAYP
KPSTVLPSTDKNNGKNTTVSNLYLEGKAYQPVAVTITFNKEIGCTYSITFDGWA
KTYDVPPIEDSSSET

QNIPLTPPFVSSDGGFQNFPPGVLSLKLADPIAITNGDVSLKVGGGTLVEQDSGNL
KVNTKAPLQVAADKQLEIALADPFVSKGRLGIKAGHGLKVIDNSISGLEGLVGT
LVVLTHGHGIGTENLLNNDGSSRGVGINVRLGKDGGLSFDKKGD LVAWNKKYDT
RTLWTPDPSPNCKVIEAKDSKLT LVLTKCGSQILANMSLL⁴LKGTYEYISNAIAN
KSFTIKLLFNDKGVLMDGSSLDKDYWNKYSDDSVMSKAYENAVPFMPNLKAYP
NPITTS²TNPSTDKKSNGKNAIVSNVYLEGRAYQPVAITTTFNKETGCTYSMTDF
GWSKVYNDPIPEDTSSLT

SCSCPSAPTIFMLLQMKRARSEDTFNPVYPYGYARNQNIPFLTTPFVSSDGFQ
NFPFGVLSLKLADPIAITNGDVSLKVGGLTVEKDSGNLKVNPKAPLQVTTDKQL
EIALAYPFVSNGLGIKAGHGLKVIDKIAGLEGLAGTLVVLTKGGIGTENLENS
DGSSRGVGINVRLAKDGGLSFDKKGDVAVWNKHDDRRLTWTPDPSPNCTIDQ
ERDSKLTVLTKGSQILANVSLVVKGKFSNNPNNNTPTDKKITVKKLFNEKGV
LMDSSLTKKEYWNYNRNDNSTVSAQYDNAVFMPMNIAKYPKPTDTSAPKEDKK
SAAKRYIVSNVYIGGLPDKTVVITIKFNAETECAYSITFEFTWAKTFEDVQFDSSSF
TESYIAOE.

SCSAPSAPTIFMILLQMKRARSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ
NFPFGVLSLKLADPTITSNGDVSLKVGGLTVEQDSGNLSVNPKAPLQVGTDDKL
ELALAPFNVKDNKLDLLVGDGLKVIDKSISLPLGLLNYLVVLTKGKGNEELKN
DDGSNKGVLGVRIGEGGGLTFDDKGYLVAWNKKHDIRTLWTLTDPSPNCRID
VDKDSKLTVLTKCGSILANVSLLVYKGRFQNLNYKTNPNLKFTFKTLKLFDEN
GILKDSNNLDKNYWNRYNRNGNSILAEBQYKVAVGFMPLNAAYPKSTTTQSKLYAR
NITFGNIYLDQAYNPVVIKITFNQEADSAYSITLNYSWGKDYENIPFDS

1P9LTPPFVSSDGFKNFPPGVLSLKLADPITITNGDVSLKVGGLVVEKESGKLSV
DPKPTLQVASDNKLELSYNAPFKVENDKLSLDVGHGLKVIGNEVSSLPGLINKLV
VLTGKGIGTEELKEQNSDKIIGVINVRAGGLSFDNDGYLVAWNPKYDTRTLW
TTPDTPSPNCKMLTKKDSKLTLTLCGSGQILGNVSLLA VSGKYLNMTKDETGVKI
ILLFDRNGVLMQESSLDKEYWNYRNDNNVIGTPYENAVGFMPNLVAYPKPTSA
DAKNYSRSKIIISNVYLKGLIYQPVIILASFNQETTINGCVYSISDFTCSDKDYTGQQF
DVTSE

110. Serotype 20 host protein
 SCSPSA¹TFIMLLQMKRARSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFQ
 NFPPGVLSLKLADPITIANGDVSLKLGGLTVEKESGNLTVNPKAPLQVASGQLE
 LAYYSPFDVKNNMLTLKAGHGLAVVTKDNIDLQPLMGTLVVLTKGIGTGTSA

Figure 7 cont.

HGGTIDVRIGKNGSLAFDKNGLVAWDKENDRRITLWTTPTDTPSPNCKMSEVKDS
 KLTLILTKCGSQILGSVSLAVKGEYQNMSTASTNKNVKITLLFDANGVLLEGSSL
 DKEYWNRNNDSTVSGKYENAVPFMPNITAYKPVNSKSYARSHIFGNVYIDAKP
 YNPVVIKISFNQETQNNCVYSISFDYTCSKEYTGMQFDVTSFTFSYIAQE.

1.11: Serotype 29 fiber protein

QNIPFLTTPFVSSDGFKNFPPGVLSKLADPIAITNGDVSLKVGGLTVEQDSGNL
 SVNPKAPLQVGTDKKLELALAPPFDVRDNKLAIVGDGLKVIDRSISDLPGLLNY
 LVVLTGKGIGNEELKNDDGSNGVGLCVRIGEGGGLTFDDKGYLVAWNNKHDI
 RTLWTTLDPSPNCKIDIEKDSKLTVLTKCGSQILANVSLIIVNGKFKILNNKTDPS
 LPKSFNIKLLFDQNGVLLSNSIEKQYLNFRSGDSILPEPYKNAIGFMPNLLAYAK
 ATTDQSKIYARNTIYGNTYLDNQPNPVVIKITFNNEADSAYSITFNYSWTKDYD
 NIPFDSTSFTS

fig 7 sq 11

343

1.12: Serotype 30 fiber protein

SCSCPSAPTIFMLLQMKRARPSXDTFNPVYPYGYARNQNIPFXTPPFVXSDGFK
 NFPPGVLSKLADPIAITNGDVSLKVGGLTVEQDSGNLSVNKKAPLQVGTDKK
 LELALAPPFDVRDNKLAIVGDGLKVIDRSISDLPGLLNYLVVXTGKGIGNEELK
 NDDGSNGVGLCVRIGEGGGLTXDDKGYLVAWNNKHDIRTLWTTLDPSPNCKI
 DIEKDSKLTVLTKCGSQILANVSLIIVNGKFKILNNKTDPSLPKSFNIKLLFDQNG
 VLLSNSIEKQYLNFRSGDSILPEPYKNAIGFMPNLLAYAKATTDQSKIYARNTIY
 GNTYLDNQPNPVVIKITFNNEADSAYSITFNYSWTKDYDNIPFDSTSFTFSYIAQE

fig 7 sq 12

386

1.13: Serotype 32 fiber protein

SCSCPSAPTIFMLLQMKRARPSXDTFNPVYPYGYARNQNIPFLTTPFVSSDGFQ
 NFPPGVLSKLADPIAITANGNVSLKVGGLTLEQDSGKLIVNPKAPLQVANDKLE
 LSYADPFETSANKLSLKVGHGLKVLDEKNAGGLKDLIGTLVVLTGKGIGVEELK
 NADNTNRGVGINVRLGKDGGLSFDKKGDLVAWNNKHDDRRITLWTTDPSPNCTI
 DEERDSKLTVLTKCGSQILANVSLVVGKGFNNNNNTNPTDKKITVKLLFNEK
 GVLMDSSSLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAYPKPTTDTSAKPED
 KKSAAKRYIVSNVYIGGLPDKTVVITIKLNAETESAYSMTFEFTWAKTFENLQFD
 SSSFTFSYIAQE.

fig 7 sq 13

391

1.14: Serotype 33 fiber protein

SCSCPSAPTIFMLLQMKRARPSXDTFNPVYPYGYARNQNIPFLTTPFVSSDGFK
 NFPPGVLSKLADPITITNGDVSLKVGGLTLQEGSLTVNPKAPLQLANDKKLEL
 VYDDPFEVSTNKLKLVGHGLKVLDDKSAGGLQDLIGKLVVLTGKGIGIENLQN
 DDGSSRGVGINVRLGTDGGLSFDKRGELVAWNRKDDRRITLWTTDPSPNCKAE
 TEKDSKLTVLTKCGSQILATVSIIVLKGKYEYFVKETEPKSFVVKLLFDSKGVLL
 PTSNLSKEYWNYRSDNNIGTPYENAVPFMPNLKAYPKPTKTASDKAENKISSA
 KNKIVSNFYFGGQAYQPGTIIKFNEDIDETCAYSITFNFGWGKVYDNPFPDTSFT
 TFSYIAQE.

fig 7 sq 14

391

1.15: Serotype 34 fiber protein

Figure 7 cont.

fig 7 sq 15 SCSCPSAPTIFMLLQMKRARPS~~ED~~TFNPVYPYED~~EST~~SQH~~PF~~INPGFIS~~PN~~GFTQ
SPDGVLT~~KL~~C~~L~~TPLTTTGGSLQLKVGGGLTVDDTDGTLQKNIRATTPITKNNHSV
ELTIGNGLE~~TQ~~HNKLC~~AK~~LGNGLKFNNGDICIKDSINTLWTGINPPNCQIVENTN 338
LTDES~~DL~~KIPLKNKSSTATSETVASSKAFMPSTTAYPFNTTTRDSENYIHGICYM
TSYDRSLFPLNISIMLNSRMISSNVAYAIQFEWNLNASESPEKQHMTLTSPFFFSY
IIEDDN.

1.16: Serotype 35 fiber protein
fig 7 sq 16 SCSCPSAPTIFMLLQMKRARPS~~ED~~TFNPVYPYED~~EST~~SQH~~PF~~INPGFIS~~PN~~GFTQ
SPDGVLT~~KL~~C~~L~~TPLTTTGGSLQLKVGGGLTVDDTDGTLQENIRATAPITKNNHSV 338
ELSIGNGLE~~TQ~~NNKLC~~AK~~LGNGLKFNNGDICIKDSINTLWTGINPPNCQIVENTN
TNDGKLT~~LV~~VKN~~GL~~VNGYVSLVGVS~~DT~~VNQ~~MFT~~QKTANIQRLRYFDSSGNL
L~~TE~~ESDLKIPLKNKSSTATSETVASSKAFMPSTTAYPFNTTTRDSENYIHGICYM
TSYDRSLFPLNISIMLNSRMISSNVAYAIQFEWNLNASESPESNIMTLTSPFFFSY
TEDDN.

1.17 Serotype 36 fiber protein
fig 7 sq 17 SCSCPSAPTIFMLLQMKRARPS~~ED~~TFNPVYPYGYARNQNIPFLTPPFVSSDGFK
NFPPGVLSLKLADPIAVNGDVSLKVGGGLTVEQDSGKLKVNPKIPLQVVDQLE
LATDKPFKIENNKALDVGHGLKVIDKTISDLQGLVGKLVVLTGVGIGTETLKDK 392
NDKVIGSAVNVRLGKDGGLDFNKKGDLVAWNRYYDRRTLWTTDPDSPNCKVS
EAKDSKLT~~LV~~LTKCGSQLASVALLIVKGKYQTISESTIPKQDRNFSVKLMFDEKG
KLLDKSSLDKEYWNFRSND~~SV~~VGTA~~YD~~NAVPFMPNLKAYPKNTTSS~~TN~~PDDKI
SAGKKNIVSNVYLEGRVYQPVALT~~VK~~FNSENCAYSITFD~~FV~~WSKTYESP~~AV~~FD
SSSFTFSYIAQE.

1.18 Serotype 37 fiber protein *under varstakej*
fig 7 sq 18 SCSCPSAPTIFMLLQMKRARPS~~ED~~TFNPVYPYGYARNQNIPFLTPPFVSSDGFK
NFPPGVLSLKLADPITITNGDVSLKVGGGLTLQDGS~~LT~~VNPKAPLQVNTDKKLEL 380
AYDNPFE~~SS~~ANKLSLKVGHGLKVLDEKSAAGLKDLIGKLVVLTGKGIGTENLEN
TDGSSRGIGINVRAREGLTFDNDGYLVAWNPKYDLRTLWTT~~PD~~TSPNCTIAQDK
DSKLT~~LV~~LTKCGSQLANVSLIVVAGKYHIINNKTNPKIKSFTIKLLFNKNGVLLD
NSNLGKAYWNFRSGNSNVSTAYEKAIGFMPNLVAVSKPSNSKKYARDIVYGNLY
LGGKPDQPGVIKTTFNQETGCEYSITFNFSWSKTYENVEFETTSFTFSYIAQE.

1.19 Serotype 38 fiber protein
fig 7 sq 19 SCSCPSAPTIFMLLQMKRARPS~~ED~~TFNPVYPYGYARNQNIPFXTPPFVXSDGFQ
NFPPGVLSLKLADPITIANGNVSLKVGGGLTLEQDSGKLIVNXXKAPLQVANDKLE
LSYADPFETSANKLSLKVGHGLKVLDEKNAGGLKDLIGTLVVLTGKGIGVEELK 391
NADNTN~~RG~~VGINVRLGKDGGLSFDKKGDXVAWNKHDDRRTLWTT~~PD~~TSPNCTI
DEERDSKLT~~LV~~LTKCGSQLANVSLLVVKGKFSNINNTNPTDKKITVKLLFNEK
GVLMDSSSLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAYPKPTTDTSAKPED
KKSAAKRYIVSNVYIGGLPDKTVVITIKLNAETESAYSMTEFTWAKTFENLQFD
SSSFTFSYIAQE.

Figure 7 cont.

1.20 Serotype 39 fiber protein

IRISPSSLPLSPMDSKTSPLGCIHSNWLTQSPSPMGMSHSRWEGGSPWQEGTG
DLKVNASKPLQVATNKQLEIALAKPFEEKDGKLALKIGHGLAVVDENHHLQSL
IGTLVILTGKGIGTGRAESGGTIDVRLSGGGGLSFDKDGNLVAWNKDDDRRTLW
TTPDPSPNCKIDQDKDSKLTFLTKCGSQILANMSLLVVKGKFSMINNKVNGTD
DYKKFTIKLLFDEKGVLLKDSSLDKEYWNYRSNNNNVGSAYEEAVGFMPSTTA
YPKPPTPTNPTTTPLEKSQAKNKYVSNVYLGQAGNPVATTVSFNKETGCTYSIT
FDFAWNKTYENVQC.

339

1.21: Serotype 42 fiber protein

SCSCPSAPTIFMLLQMKRARPSSEDTFNPVYPYGYARNQNIPFLTPPFVSSDGFK
NPPPGVLSLKLANPIAITNGDVSLKVGGLTLQDGTGKLTIDTKTQLVANNKLE
LAFDAPLYEKNKGLAKTGHGLAVLTKDGIPELIGSLVILTGKGIGTGTVAGGGT
IDVRLGDDGGLSFDKKGDLVAWNKKNDRRTLWTTPDPSPNCRVSEDKDSKLTIL
LTKCGSQILASFSLVVGXYTVDKNTTNKQFSIKLLFDANGKLKSESNLGYW
NYRSDNSVVSTPYDNAVPFMPNTTAYPKIINSTTDPENKKSSAKKTVGNVYLEG
NAGQPVAVAISFNKETTADYSITDFAWSKAYETPVFDTSSMTFSYIAQE.

330

1.22: Serotype 43 fiber protein

NIPXLTPPFVSSDGFKNPPPGVLSLKLADPITTINGDVSLKVGGLTVEKESGNLT
VNPAPLQVAKGQLELAYDSPFDVKNMMLTLKAGHGLAVVTKDNTDLQPLMG
TLVVLTGKGIGTGTSAHGGTIDVRIGKNGSLAFDKDGDLVAWDKENDRRTLWT
TPDTPSNCKMSEAKDSKLTILTKCGSQILGSVLLAVKGEYQNMNTANTKKNVKI
TLLFDANGVLLAGSSXXKEYWNFRSNDSTVSGNYENAVQFMPNITAYKPTNSKS
YARSVIFGNVYIDAKPYNPVVVKISFNQETQNNCVYSISFDYTLKDYPMQFDV
TLS

328

1.23: Serotype 44 fiber protein

NIPFLTPPFVSSDGFNPPPGVLSLKLADPITTINGNVSLKVGGLTLQEGTGDLK
VNAKSPLQVATNKQLEIALAKPFEEKDGKLALKIGHGLAVVDENHHLQSLIGTL
VILTGKGIGTGSAESGGTIDVRLSGGGGLSFDKDGNLVAWNKDDDRRTLWTPD
PSPNCKIDQDKDSKLTFLTKCGSQILANMSLLVVKGKFSMINNKVNGTDYKK
FTIKLLFDEKGVLLKDSSLDKEYWNYRSNNNNVGSAYEEAVGFMPSTTAYPKPP
TPPTNPTTTPLEKSQAKNKYVSNVYLGQAGNPVATTVSFNKETGCTYSITDF
WKNKTYENVQFDSS

341

1.24: Serotype 45 fiber protein

NIPFLTPPFVSSDGFNPPPGVLSLKLADPIAITNGDVSLKVGGLTVEKDSGNLK
VNPAPLQVTTDKQLEIALAYPFVSNKGLGKAGHGLKVIDKIAGLEGLAGTLV
VLTKGIGTENLENSDGSSRGVGINVRLAKDGVLAFDKKGDLVAWNKHDDRR
LWTTDPSPNCTIDQERDSKLTFLTKCGSQILANVSLVVKGKFSNINNNANPT
DKKITVKKLFNEKGVLMDSSTLKKEYWNYRNDNSTVSQAYDNAVPFMPNIKAY
PKPSTDTSAKPEDKKSAAKRYIVSNVYIGGLPKTVITIKFNAETECAYSITFEFT
WAKTFEDVQCDSSST

345

1.25: Serotype 46 fiber protein

Figure 7 cont.

NIPFLTPPFVSSDGFKNFPPGVLSLKLADPIAIVNGDVSLKVGGLTLQEGNLTVD
 AKAPLQVANDNKLELSYADPFVKDTKLQLKVGHGLKVIDEKTSSGLQSLIGNL
 VVLTKGIGTQELKDKDDETKNIGVGINVRIGKNESLAFDKDGNLVAWDNENDR
 RTLWTTPTDTSKFKISTEKD SKLTLVLTCKGSQILASVSLAVAGSYLNMTAST
 QKSIKVSLMFDSKGLMTTSSIDKGYWNYRNKNSVVGTA YENAI PFMPLVAYP
 RPNTPD SKIYARSKIVGNVYLAGLAYQPIVITVSFNQEKDASCAYSITFEFAWNKD
 YVGQFDTTSTF

1.26 Serotype 47 fiber protein

SCSPAPTIFMLLQMKRARSEDTFNPVYPYGYARNQ NIPFLTPPFVSSDGFKNF
 PPGVLSLKLADPITITNGDVSLKVGGLTLQEGTGNLTVNAKAPLQVADDDKLE
 LSYDNPFEVSANKLSLKVGHGLKVLDEKNSGGLQELIGKL VLTGKGIGVEELKN
 ADNTNRGVGINVRLGKDGGLSFDKKGELVAWNKHNDRTLWTTDPSPNCKIE
 QDKD SKLTLVLTCKGSQILATMAFQVVKGT YENISKNTAKKSFSIKLLFDDNGKL
 LEGSSLDKDYWNFRNDDSIMPNQYDNAVPFMPNLKAYPNPKTSTVLPSTDKKS
 NKNITVSNLYLEGKAYQPVAVTITFNKETGCTYSITFEFGWAKTYDVPIPFSSSF
 TFSYIAQE.

1.27: Serotype 48 fiber protein

SDIPFLTPPFVSSDGFQNFPPGVLSLKLADPITITNGNVSLKVGGLTLQEGTDLK
 VNAKSPLQVATNKQLEIALAKPFEEKDGKLALKIGHELAVVDENLTHLQSLIGTL
 VLTGKGIGTGRAESGGTIDVRLGSGGGLSFDKDGNLVAWNKDDDRRTLWTTDP
 PSPNCKIDQDKD SKLTLVLTCKGSQILANMSLLVVKGKFSMINNKVNGTDDYKK
 FTIKLLFDEKGVLLKDSSLDKEYWNYRSNNNNVGSAYEEAVGFMPSTTAYPKPP
 TPPTNPTPLEKSQAKNKYVSNVYLGGAQGNPVATTVSFNKETGCTYSITFDFA
 WNKTYKMAFIPRFNF

1.28: Serotype 49 fiber protein

SCSCPSAPTIFMLLQMKRARSEDTFNPVYPYGYARNQ NIPFLTPPFVSSDGFQ
 NFPPGVLSLKLADPIATNGNVSLKVGGLTVEQDSGNLKVNPAPLQVATDNQ
 LEISLADPFVKNNKLSLKVGHGLKVIDENISTLQGLLGNLVVL TGMGIGTEELK
 KDDKIVGSAVNVRLQDGGGLTFDKKGDLVAWNKENDRRRTLWTTDPSPNCKVS
 EEKDSKLTLVLTCKGSQILASVSLLVVKGKFANINNKTNPGE DYKXFSVKLLFDA
 NGKLLTGSSLDGNYWNYKNKDSVIGSPYENAVPFMPNSTAYPKIINNGTANPED
 KKSAAKKTIVTNVYLGGAAPVATTISFNKETESNCVYSITFDFAWNKTYKNV
 PFDSSSLTFSYIAQE.

1.29.: Serotype 51 Fiber protein

SCSCPSAPTIFMLLQMKRARSEDTFNPVYPYEDESTSQHPFINPGFISPNGFTQ
 SPDGVLTNLCLTPLTTTGGPLQLKVGGLIVDDTDGTLQENIRVTAPITKNNHSV
 ELSINGLETQNNKLCAKLGNGLKFNNGDICIKDSINTLWTGKPPPNQIVENTD
 TNDGKLTLLVKNGLLVNGYVSLVGVSDTVNQMFQKSATIQRLRYFDSSGNLL
 TDESNLKIPLKNKSSATSEAATSSKAFMPSTTAYPFNTTTRDSENYIHGICYMT
 SYDRSLVPLNISIMLNSRTISSNVAYAIQFEWNLNAKESPESENIA TLTTSPFFFSYIIE
 DTTKISLCYVSTCLFFN

Figure 8:

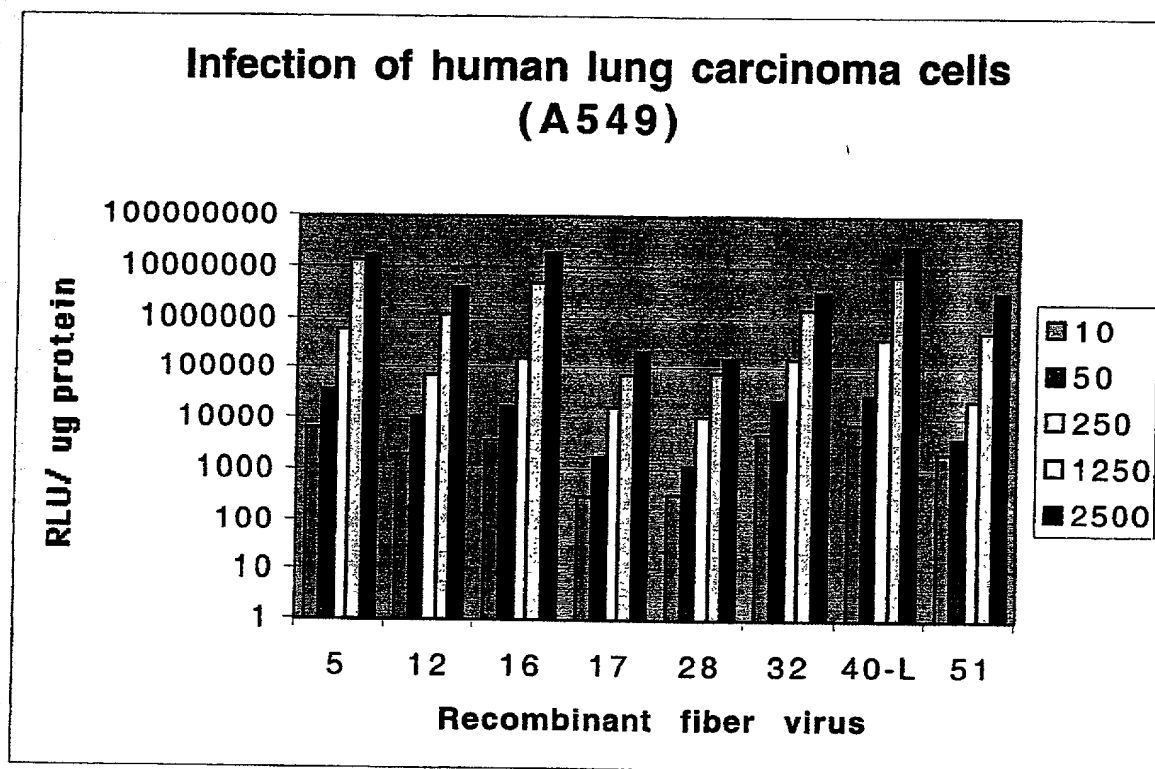


Figure 9

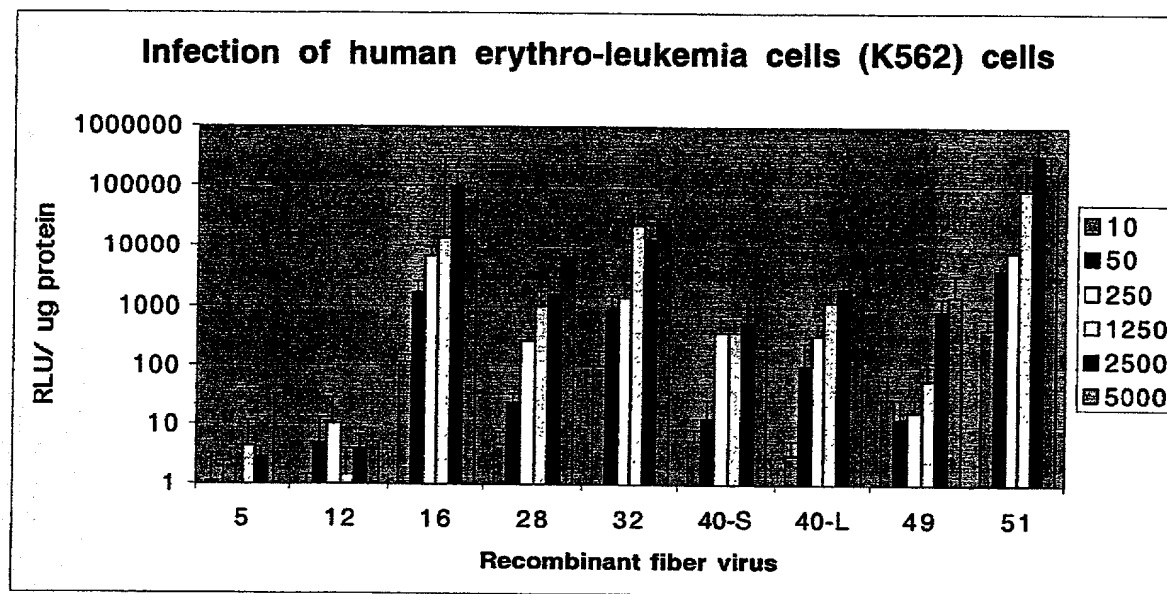


Figure 10

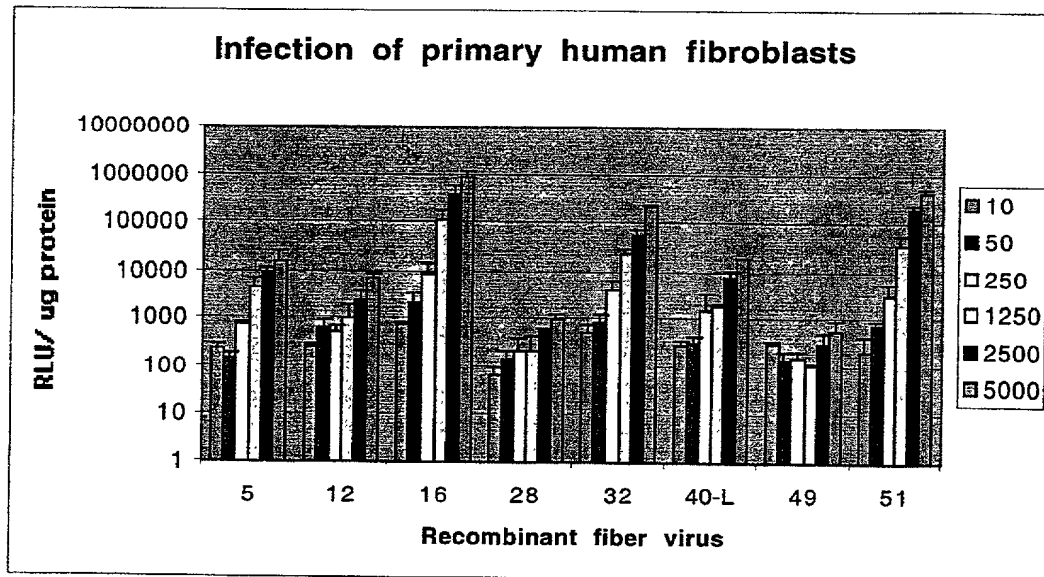


Figure 11

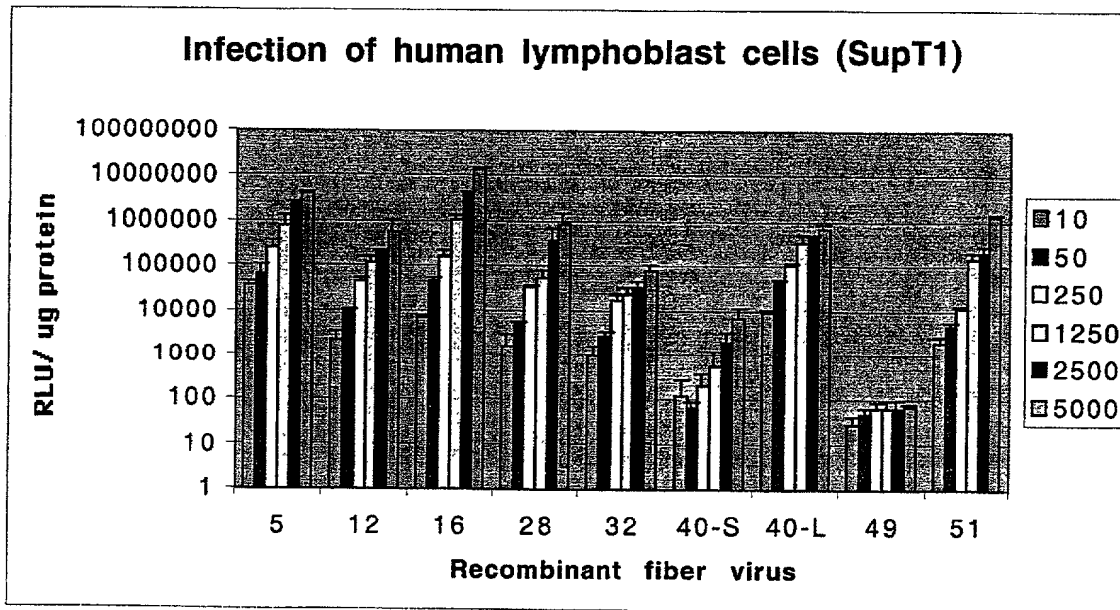


Figure 12

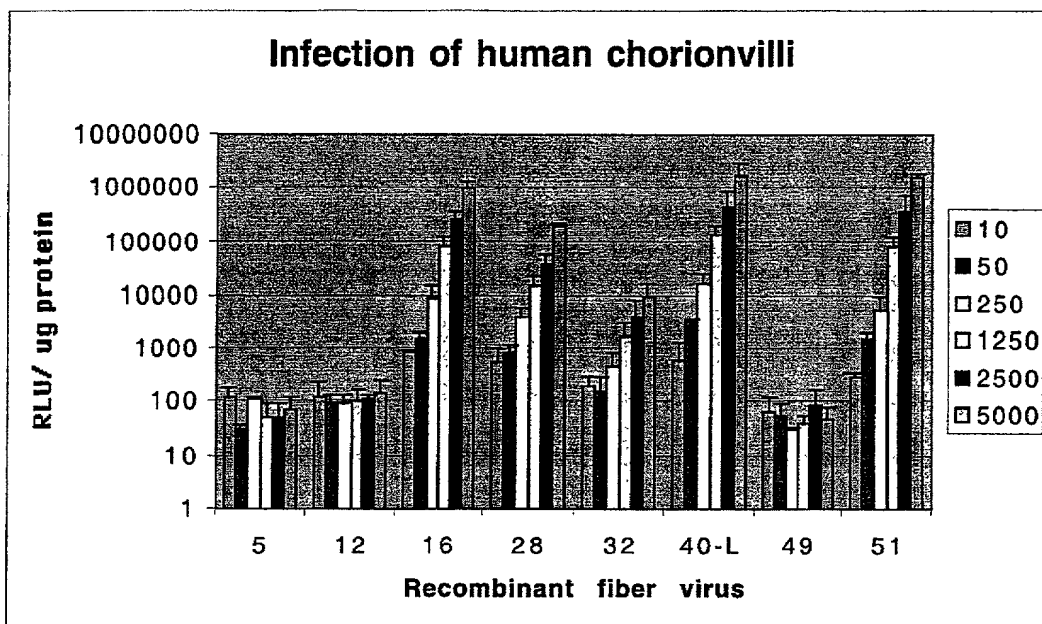


Figure 13

